



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,791

05/11/2006

Wolfgang Semmlinger

72086

6743

23872 7590 02/24/2011  
MCGLEW & TUTTLE, PC  
P.O. BOX 9227  
SCARBOROUGH STATION  
SCARBOROUGH, NY 10510-9227

EXAMINER

PATEL, DEVANG R

ART UNIT

PAPER NUMBER

1735

MAIL DATE

DELIVERY MODE

02/24/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* WOLFGANG SEMMLINGER, OTMAR FISCHER,  
GUNTER ZOTT, and RUDOLF HUBER

---

Appeal 2010-004160  
Application 10/595,791  
Technology Center 1700

---

Before JEFFREY T. SMITH, BEVERLY A. FRANKLIN, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

FRANKLIN, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

---

<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appellants appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-5, 7, 9-19, and 21. We have jurisdiction under 35 U.S.C. § 6.

An oral hearing was held on February 10, 2011.

### STATEMENT OF THE CASE

Claim 1 is representative of the subject matter on appeal and is set forth below:

1. A friction welding machine comprising:  
a frame;

a first headstock, which has a first spindle with a first workpiece holder and with a spindle drive;

a feed drive with a second workpiece holder;

a second headstock with a second spindle, with a spindle drive and with said second workpiece holder, wherein said second headstock is mounted axially movably at said frame and is connected to said feed drive, wherein at least one of said first workpiece holder and said second workpiece holder has a bridge, said bridge receiving a torque and a forge force during friction welding such that at least one of said first spindle and said second spindle does not receive the forge force and the torque produced via the friction welding, said bridge having a carrying body and a positive-locking support for connection to at least one of said first headstock and second headstock.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Deemie	3,439,853	Apr. 22, 1969
Farley	3,542,383	Nov. 24, 1970
Takagi	3,954,215	May. 4, 1976

### THE REJECTIONS

1. Claims 1-5, 7, 9-11, and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Farley.
2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Farley as applied to claim 1 above, and further in view of Deemie.

### ISSUE

Did the Examiner err in determining that Farley indicates that backup plate 52 and actuator block 40 of Farley absorb torque forces such that spindle 17 of Farley does not receive such torque forces?

We answer this question in the affirmative and REVERSE.

### ANALYSIS

It is the Examiner's position that:

[B]ackup plate (52) and block (40) in the workpiece holder 12 are collectively equivalent to a bridge and such is structurally similar to support plate 33 of the claimed bridge (present fig. 4). Farley discloses: "*Axial thrust applied by the workpiece WP-2 against the workpiece WP-1 is transferred to the backup plate 52 and then into the actuator block 40*" (col. 3, lines 15-17). Therefore, it is the Examiner's position that the bridge of Farley is reasonably expected to absorb torque and forge forces so that the spindle upstream does not receive such forces because the apparatus of Farley as modified is structurally indistinguishable from the claimed apparatus.

Ans. 11.

In response, Appellants state:

The Examiner's Answer takes the position that the backup plate 52 and the actuator block 40 of Farley et al. are reasonably expected to absorb torque forces so that the spindle 17 upstream does not receive such torque forces. However, there is no factual basis for such an argument since nowhere in Farley et al. is it disclosed that the backup plate 52 and the actuator block 40 absorb torque forces and prevent them from being transmitted to the spindle 17. In fact, the arrangement of the chuck assembly 12 being connected to the spindle 17 as disclosed in Farley et al. disadvantageously allows torque forces to be transmitted directly to the spindle 17. Column 2, lines 1-11 of Farley et al. disclose that the chuck assembly 12 has a chuck body 31, which is connected to a spindle nose 33 via a screw connection. According to Farley et al., the spindle nose 33 connects the chuck assembly 12 to the spindle 17. Thus, any torque exerted on the chuck body 31 is transmitted directly to the spindle 17 as a result of the chuck body 31 being connected to the spindle 17 via the spindle nose 33.

Reply Br. 2.

We agree with Appellants' position as presented above. Notably, throughout the Answer, the Examiner does not explain how the torque forces exerted on chuck body 31, which is connected to spindle nose 33 by a screw connection (screws 32, e.g., shown in Figure 2 of Farley) do not transmit to spindle 17. The teachings relied upon by the Examiner (reproduced, *supra*) only indicate that axial forces applied by the workpiece WP-2 against the workpiece WP-1 are transferred to backup plate 52 and actuator block 40 of Farley. This is not an indication that torque forces exerted on chuck body 31 is absorbed by backup plate 52 and actuator block 40 such that spindle 17 does not receive such forces, and the Examiner does not explain otherwise.

Hence, the Examiner's assertion that backup plate 52 and actuator block 40 is equivalent to Appellants' claimed "bridge receiving a torque and a forge force during friction welding such that at least one of said first spindle and said second spindle does not receive the forge force and the torque produced via the friction welding" is in error.

We therefore reverse all of the rejections (the remaining references of Takagi and Deemie do not cure the above-mentioned deficiency of Farley).

#### CONCLUSIONS OF LAW AND DECISION

Each rejection is reversed.

REVERSED

sld

MCGLEW & TUTTLE, PC  
P.O. BOX 9227  
SCARBOROUGH STATION  
SCARBOROUGH NY 10510-9227